



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,263	03/16/2004	Thomas M. Brown	2003-301.nonprov	4322
7590	01/12/2006			
EXAMINER				
DEUBLE, MARK A				
ART UNIT		PAPER NUMBER		
3651				

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/802,263	Applicant(s) BROWN ET AL.	
	Examiner Mark A. Deuble	Art Unit 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-13 is/are allowed.
- 6) ☒ Claim(s) 1-9 and 14-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/16/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-9, and 14-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Bonnet (U.S. Patent No. 5,971,132).

Bonnet shows a bi-directional transition module 10 which can change the translation direction of an article translating on a primary roller conveyor 20 along a first axis by moving the article to a first or second secondary conveyor 14a/14b disposed at an angle to the roller conveyor. The module has a chassis (not shown) which supports a first drive member set 25a,c,e including endless flexible drive belts 32 and a second drive member set 25b,d including endless flexible drive belts 32 between the rollers of the primary conveyor in a serial fashion with respect to the translation direction of an article on the primary conveyor. The drive belts have a first segment with a low profile that does not extend above a plane defined by the tops of the rollers as it cycles through the upper run of the belt between pulleys 30. A second segment of the drive belts is defined by posts 35 having an apex that extends above the plane defined by the tops of the rollers as it cycles through the upper run of the belt. Each of the belts is driven by its own reversible motor 44 though its own common drive shaft. The belts of the first and second sets cycle through their upper runs in directions orthogonal to the axis of the primary conveyor independently of one another so that they are alternatively cyclable in opposite

directions to move articles toward the first and second secondary conveyors. Thus Bonnet shows all the structure required by claims 1, 4-9, and 14-20.

In regard to the limitation of claims 6 and 18, that the at least one flexible drive members of the first and second drive member set are driven by a first and second common drive shaft respectively, it is noted that the belts of the first and second drive member sets, as they were characterized above, have their own drive shafts instead of the claimed common drive shaft. However, the claims only require that each drive member set include one flexible drive member so that the first and second common drive shafts need only drive a single belt. Therefore Bonnet shows all that is required by the claims because it may be characterized as having a first drive member set 25a with a belt 32 driven by a first common drive shaft and a second drive member set 25b with a belt 32 driven by a second common drive shaft.

3. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Shyr et al. (U.S. Patent No. 5,699,892).

Shyr et al. shows a directional transition module M1 that moves an article translating along a first axis on a primary roller conveyor 20 having left and right sides to a secondary conveyor M2 disposed at an angle to the roller conveyor. The module has a chassis 3 which supports a first drive member set including endless flexible drive belts 81/81' between the rollers of the primary conveyor. The drive belts have a first segment with a low profile that does not extend above a plane defined by the tops of the rollers as it cycles through the upper run of the belt on frame members 71/71'. A second segment of the drive belts is defined by rollers 812 having an apex that extends above the plane defined by the tops of the rollers as it cycles through the upper run of the belt. The belts are driven by a reversible motor 2 through a common drive

Art Unit: 3651

shaft 41 and drive wheels 51. While Shyr et al. shows only one secondary conveyor, the reversibility of the motor means that the module is capable of servicing a second secondary conveyor on the opposite side of the primary conveyor from the secondary conveyor M2. Thus Shyr et al. shows all the structure required by claims 1-4.

Allowable Subject Matter

4. Claims 10-13 are allowed.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited art not discussed above show directional transition modules which are similar to that of the present invention.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (571) 272-6912. The examiner can normally be reached on Monday through Friday except for alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene O. Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 3651

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md

MARK A. DEUBLE
PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Mark Deuble', with a long, sweeping horizontal stroke extending to the right.